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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HUTTON JR, WILLIAM D

ART UNIT	PAPER NUMBER
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2179

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,775

Applicant(s)

MEDING, UWE

Examiner

Doug Hutton

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 4-7,9-11,15-17 and 19-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,8,12-14 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I in the reply filed on 28 October 2004 is acknowledged.

Claims 4-7, 9-11, 15-17 and 19-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 28 October 2004.

Specification

The disclosure is objected to because of the following informalities:

- the number "206" on Page 12, Line 12 should be amended to – 210 – because that is the proper reference number.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the "removing any created rectangle whose interior would not include at least one text quad" (see Claim 2, Lines 10-11).

The examiner cannot locate where in the Specification this particular limitation (hereinafter, Limitation 1) is discussed. The limitations that immediately precede

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Limitation 1 (hereinafter, Limitations 2) are discussed from Page 11, Line 28 to Page 12, Line 17. Limitations 2 are performed for the purpose of recreating the table so that it closely resembles the table as it appears in the original document (see Page 12, Lines 14-15). However, the text surrounding this passage mentions nothing about a “created rectangle” being removed. Stated more specifically, this passage mentions nothing about **removing** a “created rectangle” that does “**not include at least one text quad**,” as stated in Claim 2, Lines 10-11.

For purposes of examination, the examiner will interpret Limitation 1 to simply mean that a “created rectangle” may be removed, regardless of what is enclosed inside the rectangle.

Appropriate correction is required.

Claim Objections

Claim 3 is objected to because of the following informalities:

- the phrase “*textual* and textual associated symbols” in Line 5 should be amended to — text and textual associated symbols — because it appears to include a typographic error.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3, 8, 12-14 and 18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-3, 8, 12-14 and 18:

The language of the claims raise a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

In regard to Claims 1-3 and 8, the claimed invention is so abstract and sweeping that it covers the method as practiced by a human operator assisted only by pencil and paper. The claims do not include a particular machine or apparatus, and no machine-implemented steps are recited. Every step is capable of performance by the human mind. Accordingly, the claimed invention is not in the technological arts. A method of this sort, traditionally called a "mental process," is not patentable subject matter.

"Phenomena of nature, though just discovered, *"mental processes,"* abstract intellectual concepts are not patentable as they are the basic tools of scientific and technological work." (emphasis added) *Gottschalk v. Benson*, 75 U.S.P.Q. 673, 675 (U.S.S.C. 1972). See also, *In re Prater and Wei*, 159 U.S.P.Q. 583 (1968), *rehearing* U.S.P.Q. 571 (1969).

Applicant may obviate the rejections by amending the phrase "A method" - in Line 1 of Claims 1, 3 and 8 - to — A computerized method —.

In regard to Claims 12-14 and 18, the claimed invention recites only software modules and does not recite any computer hardware. Stated differently, each of the "means for" elements of the claims refer only to software components and do not include computer hardware. Accordingly, the claimed invention is not tangible.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 2:

The claims recite the limitation "merging the newly created *or enlarged* polygon (of step "a") with any other polygon found to overlap with the step "a" polygon" (see Claim 1, Lines 12-13). This limitation is indefinite because it is unclear whether the "newly created or enlarged polygon" is referring to the "quads" circumscribing words, portions of words and graphic elements (see Lines 1-2), the "total polygon" created by

merging the first and second quads (see Lines 8-9) or the “encompassing polygon” that includes the first quad (see Lines 10-11).

In the examiner’s opinion, this limitation refers to the “total polygon” in Line 9 **and** the “encompassing polygon” in Line 10. **One** of these two polygons is created, depending on whether the selected first quad intersects a second quad (see Lines 6-11). Subsequently, step “b” merges the “newly created” polygon (i.e., either the “total” polygon or the “encompassing” polygon) with any polygon that overlaps the “newly created” polygon (see Lines 12-13).

This rejection may be obviated by amending the limitation to — merging the newly created polygon of step “a” with any other polygon found to overlap with the step “a” polygon —.

For purposes of examination, the examiner assumes that Applicant will adopt the suggested amendment.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Handley, U.S. Patent No. 6,006,240.

Claim 3:

Handley discloses a method of mining data from a visually displayable source document having quads defining textual and graphics elements (see Figures 1-4; see Column 1, Lines 13-20; see Column 5, Lines 40-43; Column 8, Lines 8-22 – Handley discloses this limitation in that the table recognition software operates using standard OCR hardware; a document is scanned, wherein text and lined tables are placed into boxes), comprising the steps of:

- combining quads, having less than a predetermined separation, into frames (see Figures 4 and 6; see Column 9, Lines 45-56; see Column 10, Lines 5-10; see Column 10, Lines 27-34; see Column 10, Lines 39-52 – Handley discloses this limitation in that the table recognition software merges the cells and rows of located tables);
- generating textual paragraphs, in an output document, from frames detected to contain only textual and textual associated symbols (see Figure 6; Column 8, Lines 8-22 – Handley discloses this limitation in that the table recognition software includes standard OCR software, which generates “textual paragraphs from frames detected to contain only textual and textual associated symbols” in that it will place paragraphs of text into an output file when it “detects frames” that “contain only text and textual associated symbols”); and
- generating tables, in said output document, from frames detected to contain only vertically and horizontally oriented straight lines enclosing textual and textual associated symbols (see Column 5, Line 65 through Column 6, Line 15 –

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Handley discloses this limitation in that the table recognition software generates tables regardless of whether the tables in the original document are lined, semi-lined or line-less; thus, the software generates tables "from frames detected to contain only vertically and horizontally oriented straight lines enclosing textual and textual associated symbols").

Claim 14:

Claim 14 merely recites an apparatus for performing the method of Claim 3. The apparatus comprises "means for" that are merely computer software modules for performing the various functions. Handley comprises computer software modules for performing the same functions. Thus, Claim 14 is rejected as indicated in the above rejection for Claim 3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Handley, in view of Stinger, U.S. Patent Application Publication No. US 2004/0093355.

Claim 1:

Handley discloses a method of extracting data from a source document wherein words, portions of words and graphic elements are circumscribed by polygons hereinafter referred to as quads (see Figures 1-4; see Column 1, Lines 13-20; see Column 5, Lines 40-43; Column 8, Lines 8-22 – Handley discloses this limitation in that the table recognition software operates using standard OCR hardware; a document is scanned, wherein text and lined tables are placed into boxes), comprising the steps of:

- selecting a first frame of quads assigned to a polygon (see Column 10, Lines 64-65 – Handley discloses this limitation in that the table recognition software sets the table frame as the bounding box of all cells and rulings located);
 - [step “c”] decomposing all graphical elements within the selected frame into straight lines (see Column 10, Line 66 through Column 11, Line 18 – Handley discloses this limitation in that the table recognition software stores each frame as two vertical rulings and two horizontal rulings);
 - [step “d”] assembling components of the selected frame into a table when examination of the decomposed frame indicates a predetermined arrangement of table cell defining straight lines (see Column 10, Line 66 through Column 11, Line 18 – Handley discloses this limitation in that the table recognition software merges cell frames into a table; the table recognition software generates the table regardless of whether the table in the original document is lined, semi-lined or line-less; moreover, the “rulings” are straight lines; thus, the software generates tables “when

examination of the decomposed frame indicates a predetermined arrangement of table cell defining straight lines”); and

- repeating steps “c” and “d” for identifying any possible table in any remaining frames of assigned quads (Handley discloses this limitation in that the table recognition software locates multiple tables within an original document and recreates the tables in the output file).

Handley fails to expressly disclose:

- oversizing each quad in a predetermined range of the document ;
- selecting a first quad;
 - [step “a”] determining if said selected first quad intersects and thus overlaps a second quad,
 - if overlap is detected, assigning said second quad to the selected first quad, thereby creating a total polygon area larger than either original entity; and
 - if overlap is not detected, creating an encompassing polygon including said selected first quad;
 - [step “b”] merging the newly created or enlarged polygon of step “a” with any other polygon found to overlap with the step “a” polygon;
- repeating steps “a” and “b” for any further unassigned quads left in said predetermined range and not encompassed by a polygon;

Stinger teaches a method of extracting data from a source document (see Figures 1, 2 and 6; see Paragraphs 0010-0014 – Stinger teaches this limitation in that the table recognition software forms word clusters and automatically generates a table bounding box by expanding the box to include the entire table), comprising the steps of:

- oversizing each quad in a predetermined range of the document (see Figure 6 and Paragraphs 0053-0065; also, see Paragraphs 0031-0032 and 0037 – Stinger teaches this limitation in that the table recognition software expands the table bounding box based on the number of word clusters on a line of the document; the word clusters are generated from a list of words that includes the position and size information for all words in the document);
- selecting a first quad (see Figure 6 and Paragraphs 0053-0065; also, see Paragraph 0039 – Stinger teaches this limitation in that the table recognition software clusters the individual words in a line of text by analyzing the space between the words; thus, each word is in a “quad” and is “selected” for analysis);
 - [step “a”) determining if said selected first quad intersects and thus overlaps a second quad (see Figure 6 and Paragraphs 0053-0065; also, see Paragraph 0039 – Stinger teaches this limitation in that the table recognition software clusters the individual words in a line of text for further analysis if the space between the words is greater than a predetermined amount; thus, the table recognition software determines whether the “quads” in a line of text “overlap”),

- [step “a-i”) if overlap is detected, assigning said second quad to the selected first quad, thereby creating a total polygon area larger than either original entity (see Figure 6 and Paragraphs 0053-0065; also, see Paragraph 0039 – Stinger teaches this limitation in that the table recognition software places the words in the same cluster for further analysis if the space between the words is greater than a predetermined amount; thus, the table recognition software assigns the “second quad” to the “first quad” if “overlap” is detected); and
- [step “a-ii”) if overlap is not detected, creating an encompassing polygon including said selected first quad (see Figure 6 and Paragraphs 0053-0065; also, see Paragraph 0039 – Stinger teaches this limitation in that the table recognition software determines that the line of text is not part of a table when the spacing between the words is generally uniform; as a result, that particular line of text is not subject to further analysis; thus, the table recognition software creates a separate cluster that includes only the selected “first quad”);
- [step “b”) merging the newly created or enlarged polygon of step “a” with any other polygon found to overlap with the step “a” polygon (see Figure 6 and Paragraphs 0053-0065; also, see Paragraphs 0033-0052 – Stinger teaches this limitation in that the table recognition software merges the

clusters of text into a table bounding box, if the text densities of adjoining clusters match);

- repeating steps “a” and “b” for any further unassigned quads left in said predetermined range and not encompassed by a polygon (see Figure 6 and Paragraphs 0053-0065; also, see Paragraphs 0033-0052 – Stinger teaches this limitation in that the table recognition software determines whether the end of the document has been reached; if not, then the software looks for lines in the current table and checks for the start of a new table within the document), for the purpose of accurately determining the beginning and end of tables within the document (see Paragraph 0014).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Handley, to include:

- oversizing each quad in a predetermined range of the document;
- selecting a first quad;
 - [step “a”] determining if said selected first quad intersects and thus overlaps a second quad,
 - if overlap is detected, assigning said second quad to the selected first quad, thereby creating a total polygon area larger than either original entity; and
 - if overlap is not detected, creating an encompassing polygon including said selected first quad;

- [step “b”] merging the newly created or enlarged polygon of step “a” with any other polygon found to overlap with the step “a” polygon;
- repeating steps “a” and “b” for any further unassigned quads left in said predetermined range and not encompassed by a polygon,

for the purpose of accurately determining the beginning and end of tables within the document, as taught by Stinger.

Claim 2:

Handley discloses a method, wherein:

- step c includes retaining relative placement data of each decomposed line as obtained from the source document (see Column 1, Lines 31-43; see Column 8, Lines 35-50 – Handley discloses this limitation in that the table recognition software collects coordinates of the cell frames; moreover, Handley discloses that extracting geometric information from tables during scanning is well-known in the art of OCR, as discussed in Column 1, Lines 31-43); and
- step d comprises the additional sub-steps of:
 - combining co-aligned lines in the frame (see Column 7, Lines 7-27 – Handley discloses this limitation in that the table recognition software combines horizontal and vertical rulings that are close together and overlap);

- creating a rectangular table boundary (see Column 7, Lines 7-27 – Handley discloses this limitation in that the table recognition software determines a table frame that contains all of the table cells and rulings);
- splitting any previously formed rectangle determined to be cut by any selected co-aligned line inserted into said rectangular table boundary to create at least two new rectangles (see Figure 11; see Column 9, Lines 10-29 – Handley discloses this limitation in that the table recognition software locates all of the rulings of an original document during scanning and extends and combines the rulings to match up closely with those of the original table in the document; for example, see Figure 11); and
- removing any created rectangle whose interior would not include at least one text quad (see Figure 11; see Column 10, Line 66 through Column 11, Line 14 – Handley discloses this limitation in that the table recognition software removes a ruling from the separator list; also, see Figure 11 → the cell under the “Capital Leases” column and in the “1991” and “Future years” rows does not include a ruling that separates the “1991” and “Future years” rows, while the cells under the “Operating Leases” column and in the “1991” and “Future years” rows does include a horizontal ruling that separates the “1991” and “Future years” into two cells; thus, during construction of the table, the table recognition software “removed a created rectangle that does not include text” in that the table cell under the

“Capital Leases” column and in the “1991” and “Future years” rows is a single cell that does not contain text).

Claim 12:

Handley discloses an apparatus for extracting data from a source document wherein words, portions of words and graphic elements are circumscribed by polygons, hereinafter referred to as quads (see Figures 1-4; see Column 1, Lines 13-20; see Column 5, Lines 40-43; Column 8, Lines 8-22 – Handley discloses this limitation in that the table recognition software operates using standard OCR hardware; a document is scanned, wherein text and lined tables are placed into boxes), comprising:

- means for decomposing all graphical elements within each frame into straight lines (see Column 10, Line 66 through Column 11, Line 18 – Handley discloses this limitation in that the table recognition software stores each frame as two vertical rulings and two horizontal rulings); and
- means for assembling components of any frame into a table when examination of the decomposed elements in a frame indicates a predetermined arrangement of table cell defining straight lines (see Column 10, Line 66 through Column 11, Line 18 – Handley discloses this limitation in that the table recognition software merges cell frames into a table; the table recognition software generates the table regardless of whether the table in the original document is lined, semi-lined or line-less; moreover, the “rulings” are straight lines; thus, the software

generates tables “when examination of the decomposed frame indicates a predetermined arrangement of table cell defining straight lines”).

Handley fails to expressly disclose:

- means for oversizing each word and graphic quad in a selected range of the document; and
- means for assembling quads that overlap into frames.

Stinger teaches an apparatus of extracting data from a source document (see Figures 1, 2 and 6; see Paragraphs 0010-0014 – Stinger teaches this limitation in that the table recognition software forms word clusters and automatically generates a table bounding box by expanding the box to include the entire table), comprising:

- means for oversizing each word and graphic quad in a selected range of the document (see Figure 6 and Paragraphs 0053-0065; also, see Paragraphs 0031-0032 and 0037 – Stinger teaches this limitation in that the table recognition software expands the table bounding box based on the number of word clusters on a line of the document; the word clusters are generated from a list of words that includes the position and size information for all words in the document); and
- means for assembling quads that overlap into frames (see Figure 6 and Paragraphs 0053-0065; also, see Paragraph 0039 – Stinger teaches this limitation in that the table recognition software places the words in the same cluster for further analysis if the space between the words is greater than a

predetermined amount; thus, the table recognition software assembles “quads that overlap” into “frames”),
for the purpose of accurately determining the beginning and end of tables within the document (see Paragraph 0014).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus, disclosed in Handley, to include:

- means for oversizing each word and graphic quad in a selected range of the document; and
- means for assembling quads that overlap into frames,

for the purpose of accurately determining the beginning and end of tables within the document, as taught by Stinger.

Claim 13:

Handley discloses an apparatus, comprising in addition:

- means for retaining relative placement data of each decomposed line as obtained from the source document (see Column 1, Lines 31-43; see Column 8, Lines 35-50 – Handley discloses this limitation in that the table recognition software collects coordinates of the cell frames; moreover, Handley discloses

that extracting geometric information from tables during scanning is well-known in the art of OCR, as discussed in Column 1, Lines 31-43);

- means for combining co-aligned straight lines after decomposition in a frame ascertained to comprise a table (see Column 7, Lines 7-27 – Handley discloses this limitation in that the table recognition software combines horizontal and vertical rulings that are close together and overlap);
- means for creating a rectangular table boundary in a frame ascertained to comprise a table (see Column 7, Lines 7-27 – Handley discloses this limitation in that the table recognition software determines a table frame that contains all of the table cells and rulings);
- means for splitting any previously formed rectangle determined to be cut by any selected co-aligned line inserted into said rectangular table boundary to create at least two new rectangles (see Figure 11; see Column 9, Lines 10-29 – Handley discloses this limitation in that the table recognition software locates all of the rulings of an original document during scanning and extends and combines the rulings to match up closely with those of the original table in the document; for example, see Figure 11); and
- means for generating a mined document from which data may be displayed (see Figure 11).

Allowable Subject Matter

Claims 8 and 18 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 101 set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 8 and 18:

The closest prior art discloses combining closely spaced quads into a polygon frame (see US 2004/0093355), replacing co-aligned lines with a single line (see US 6,006,240), recreating a table using decomposed lines to create cells (see US 6,006,240) and eliminating frames where text quads are outside table created cells (see US 2004/0093355).

Additionally, the closest prior art discloses placing horizontally and vertically oriented graphical lines into quads (see US 5,335,290), correcting any skew angle of scanned text and table grid lines (see US 5,588,072), evaluating whether tables within scanned documents have partial grid lines or no grid lines and reconstructing said tables in an output file (see US 6,711,292), and merging table grid lines that overlap each other (see US 6,006,240).

The prior art fails to disclose or suggest eliminating a frame from potential table consideration that encloses a graphical line that is oriented in any position other than horizontal or vertical.

Accordingly, the subject matter of Claims 8 and 18 is allowable.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Wang, U.S. Patent No. 5,588,072; Wang, U.S. Patent No. 6,711,292; Cullen et al., U.S. Patent No. 5,335,290; Alam, U.S. Patent No. 5,737,442; Tachikawa, U.S. Patent No. 5,048,107; Ohta, U.S. Patent No. 5,420,695; Wang, U.S. Patent No. 5,774,579; and Meding, U.S. Patent No. 6,647,156.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Doug Hutton whose telephone number is (571) 272-4137. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached at (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

WDH
March 13, 2005



**DOUG HUTTON
PATENT EXAMINER
TECH CENTER 2100**